

Appl. No. : 10/067,634
Filed : Herewith

REMARKS

In the Office Action mailed on March 24, 2004, the Examiner indicated that Claims 15-35 are pending in the present Application. However, in the Preliminary Amendment filed on April 26, 2002, Claims 15-38 were added. Applicants believe that the omission of Claims 36-38 from the Office Action was an oversight and submit that Claims 1-38 are currently pending.

Claims 32-34 were indicated to be allowable if rewritten in independent form. Claim 32 has been amended to include the subject matter of Claims 22 and 23, from which it previously depended. Claims 33 and 34 depend from Claim 32. Thus, Applicants submit that Claims 32-34 are in condition for allowance.

Claim 15 has been amended to indicate that the recited metal source chemical is a cyclopentadienyl compound of a rare earth element selected from the group consisting of Sc, La, Ce, Pr, Nd, Sm, Eu, Gd, Tb, Dy, Ho, Er, Tm, Yb and Ly. Support for this amendment can be found, for example, at page 14, lines 6-23. Claims 22 and 38 have been amended to indicate that the recited rare earth metal source chemical is a cyclopentadienyl compound comprising a rare earth metal selected from the group consisting of lanthanum and gadolinium. Support for this amendment can be found, for example, at page 11, lines 8-11 and lines 20-25, and in Examples 4 and 6. No new matter is added by any of the present amendments.

Claim Rejections Under 35 U.S.C. §102(e)

Claims 15-31 and 35 were rejected under 35 U.S.C. §102(e) as anticipated by Putkonen (U.S. Patent No. 6,548,424). The Examiner found that Putkonen discloses an ALD process for depositing an yttrium oxide film, including the use of an yttrium cyclopentadienyl compound.

Claim 15 has been amended herein to indicate that the recited metal source chemical is a cyclopentadienyl compound of a rare earth element selected from the group consisting of Sc, La, Ce, Pr, Nd, Sm, Eu, Gd, Tb, Dy, Ho, Er, Tm, Yb and Ly. As Putkonen has no teaching or suggestion of an ALD process utilizing such metal source chemicals, Applicants request the withdrawal of the rejection of Claim 15. In addition, as Claims 16-21 depend from Claim 15 and contain all of the features thereof, in addition to further distinguishing features, Applicants request the withdrawal of the rejection of these claims as well.

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Claims 22 and 38 have been amended to indicate that the recited rare earth metal source chemical is a cyclopentadienyl compound comprising a rare earth metal selected from the group consisting of lanthanum and gadolinium. As Putkonen has no teaching of an ALD process utilizing a rare earth metal source chemical that is a cyclopentadienyl compound comprising lanthanum or gadolinium, Applicants request withdrawal of the rejection of Claim 22, as well as Claims 23-31, which depend therefrom. For the same reason, Applicants submit that the Putkonen reference does not anticipate Claim 38.

Conclusion

For the reasons presented above, Applicants submit that the present application is in condition for allowance. If any issues remain, the Examiner is cordially invited to contact Applicants' representative at the number provided below in order to resolve such issues promptly.

Respectfully submitted,

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